

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Cancelled)
2. (Currently Amendment) A routing control method comprising:

monitoring, by a first router, a status of a connection with an external network and when the connection is to be cancelled, transmitting, by the first router, a routing stop message notifying a routing stop router time, as a time remaining until a stop of a routing function of the first router, to nodes in a local area network to which the first router is connected;

~~calculating~~determining, by a second router, a routing capability time required to enable the routing function when the second router is configured to execute the routing function;

transmitting, by the second router to the nodes in the local area network to which the second router is connected, a routing capability message that includes the routing capability time; and

setting a time for switching, by the nodes receiving the routing stop message and the routing capability message, a destination of transmissions from the first router to the second router based on the routing capability time inside the routing capability message, wherein the routing capability time is determined in and transmitted from the second router.

3. (Previously Presented) The routing control method according to claim 2, including:

if the first router receives a message directed toward the external network after the stop of the routing function of the first router, storing, by the first router, the message directed toward the external network; and

after the first router receives the routing capability message from the second router, transferring, by the first router, the stored message to the second router.

4. (Previously Presented) The routing control method according to claim 3, wherein after the first router receives the routing capability message, transferring, by the first router, the stored message to the second router after the routing capability time has lapsed.

5. (Previously Presented) The routing control method according to claim 2, further comprising:

deciding, by the second router, that the routing function of the first router has stopped if the routing stop time in the message received from the first router is equal to or smaller than a predetermined time.

6. (Previously Presented) A router comprising:

a stop message receiving section for receiving a routing stop message indicating a routing stop time, as a time remaining until a stop of a routing function, from another router which is executing the routing function;

a master transition deciding section for deciding whether or not the router is configured to execute the routing function when the message receiving section receives the routing stop message;

a transition time calculating section for calculating a routing capability time required to enable the routing function when the master transition deciding section decides that the router is configured to execute the routing function;

a routing capability message generating section for generating a routing capability message including the routing capability time; and

a capability message transmitting section for transmitting the routing capability message to nodes in a local area network to which the router is connected.

7. (Previously Presented) The router according to claim 6, further including:

a status monitor section for monitoring a status of a connection with an external network and deciding whether or not to cancel the connection;

a routing stop time calculating section for calculating the routing stop time remaining until the stop of the routing function of the router when the status monitor section decides to cancel the connection during execution of the routing function;

a routing stop message generating section for generating the routing stop message indicating the time calculated by the routing stop time calculating section; and

a stop message transmitting section for transmitting the routing stop message to one of the nodes on the local area network to which the router is connected.

8. (Previously Presented) The router according to claim 7, further including:

a buffer for storing a message to be sent to the external network, received from the local area network to which the router is connected after the routing function is stopped, and

a capability message receiving section for receiving the routing capability message from the another router,

wherein, when the routing capability message is received, the message stored in the buffer is transmitted to a source router which is a source of the message.

9. (Previously Presented) The router according to claim 7, wherein the routing stop message is a router advertisement message of ICMPv6 and has the routing stop time set in a lifetime field thereof, and the routing stop message is sent to the nodes in the local area network.

10. (Previously Presented) The router according to claim 7, wherein, if the routing stop time in the routing stop message received is equal to or smaller than a predetermined time, the router, which is a source of the routing stop message, is under transition to stop the routing function.

11. (Previously Presented) The router according to claim 7, wherein the routing capability message is a router advertisement message of ICMPv6 and the time until the routing function is enabled is set in a reachable time field thereof, and the routing capability message is sent to the nodes in the local area network.

12. (Previously Presented) A terminal comprising:

a terminal receiving section for receiving a routing stop message indicating a routing stop time, as a time remaining until a stop of a routing function from a first router currently executing the routing function, and a routing capability message including a routing capability time calculated by a second router, the routing capability time being a time required to enable the routing function by a second router; and

a router switch section for switching a communication to be sent to an external network from the first router to the second router by a timing depending upon the routing stop message and the routing capability message received by the terminal receiving section.

13. (Previously Presented) The terminal according to claim 12, wherein the switching by the router switch section occurs after a lapse of the routing stop time and a lapse of the routing capability time.

14. (Previously Presented) The routing control method according to claim 2, wherein the second router calculates the routing capability time based on a time required to set up connection to the external network or a time required to set up for a routing process.

15. (Previously Presented) The router according to claim 6, wherein the transition time calculating section calculates the routing capability time based on a time required to set up connection to the external network or a time required to set up for a routing process.